



## **Memorandum**

**To:** Mike Cirian, P.E., EPA Onsite RPM

**From:** Kara McKenzie, CDM Smith

**Date:** March 8, 2013

**Subject:** Flowerpot Action Level Clarification for Libby Asbestos Site, Libby, Montana

### **Introduction**

As part of the response actions on the Libby Asbestos Project, the United States Environmental Protection Agency (EPA) developed project-specific action level and clearance criteria for the removal of Libby Amphibole (LA) asbestos at residential and commercial properties. The Draft Final Libby Asbestos Site, Residential/Commercial Cleanup Action Level and Clearance Criteria Technical Memorandum (Tech Memo) (EPA 2003) and Tech Memo Amendment A (EPA 2011) provide action levels that are used for selecting properties for response actions and criteria used to evaluate if the response actions were successful. While final site-specific cleanup standards will be established upon completion of the remedial investigation/feasibility study (RI/FS) and publication of a record of decision (ROD), the Tech Memo and Amendment A will continue to serve as guidance for project-specific decision making, action levels, and clearance criteria.

During 2012 investigation activities, questions were raised about how to apply action levels from the Tech Memo and Tech Memo Amendment to observations of vermiculite in the soil in flowerpots. This memorandum is intended to provide the definition of a flowerpot and to clarify that soil action levels do not apply to flowerpots.

The criteria contained in this technical memorandum supersede references to flowerpots and action levels contained within other guidance documents issued prior to this memorandum.

### **Definition**

For the purposes of this memorandum, the following definitions apply:

- Flowerpot:
  - Receptacle with a solid bottom
  - Moveable by one adult when full of soil (maximum soil volume approximately 5-gallons)
  - Not securely fixed to another object

- Planter:
  - Receptacle without a solid bottom (see exception below)
  - Receptacle with a solid bottom that cannot be moved by one adult when full of soil
  - Container securely fixed (e.g., nailed, glued, cemented) to another object rendering it immobile

## **Action Level**

The Tech Memo states that visual confirmation of vermiculite or other vermiculite mine-related materials in a specific-use area (SUA) will generally trigger emergency response cleanup. SUAs are defined as areas receiving significant and/or intrusive use. The Tech Memo Amendment A identifies flowerpots as SUAs, making them subject to the above action level.

Despite their classification as SUAs, but in accordance with the Draft General Property Investigation (GPI) SAP (CDM Smith 2012), flowerpots have been treated differently than other SUAs due to their inherent differences (e.g., mobility, frequent soil replacement). For these reasons, flowerpots are not assigned location identifiers and are not sampled for LA.

Due to the limited nature of activity related to flowerpots, the EPA will no longer consider flowerpots as an SUA. Past investigation experience and property owner interviews have also indicated that vermiculite observed in flowerpots is typically from a commercial source and not from the former W.R. Grace vermiculite mine. Therefore, visual confirmation of vermiculite or other vermiculite mine-related materials in flowerpots will no longer trigger emergency response cleanup. For property status determination and removal planning at properties that meet another action level, visual confirmation of vermiculite or vermiculite mine-related materials in flowerpots will be treated as vermiculite in a non-SUA.

Planters, as defined above, will continue to be considered SUAs and action levels will still apply.

## **Flowerpots with Vermiculite**

Flowerpots will be visually inspected for vermiculite and other vermiculite mine-related materials during GPIs in accordance with the Draft GPI SAP, Revision 1 (CDM Smith 2012).

If vermiculite is observed in a flowerpot, the property owner will be notified. The GPI team will indicate to the property owner which flowerpots contain vermiculite and request that the owner refrain from disposing of the vermiculite-containing soil elsewhere on their property.

If the GPI team has indication (e.g., characteristics of the material in the flowerpot, property owner interview) that the flowerpot does contain mine-related material, the GPI team will contact the Environmental Resource Specialist (ERS) to coordinate disposal and replacement of the soil in those flowerpots.

Any owner wishing to dispose of vermiculite-containing soil in flowerpots is encouraged to contact ERS for assistance.

## **References**

CDM Smith. 2012. Sampling and Analysis Plan, General Property Investigation, Revision 1, Operable Unit 4, Libby Asbestos Superfund Site, Libby, Montana. April.

EPA. 2003. Draft Final Residential/Commercial Cleanup Action Level and Clearance Criteria Technical Memorandum, Libby Asbestos Project. December 15.

EPA. 2011. Amendment A Residential/Commercial Cleanup Action Level and Clearance Criteria Technical Memorandum, Libby Asbestos Project. December 21.